

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application. Please cancel Claim 1-6 in this application and add new claims 7-12 as listed below.

Listing of Claims:

Claims 1-6 (cancelled)

7. (new) An electrolytic polishing process for dental instruments of nickel-titanium alloy using an electrolyte, comprising:
 providing an electrolyte including sulfuric acid and methanol; and
 applying electricity having a current, density that is regulated so that it remains constant.
8. (new) The process of Claim 7, wherein said current density is between about 10 A/dm² and 30 A/dm².
9. (new) The process of Claim 7, wherein said electrolyte is a mixture of methanol and sulfuric acid, comprising between 0.1 mole and 10 moles of sulfuric acid.
10. (new) The process of Claim 7, wherein said electricity is supplied to a cathode and anode and wherein said cathode is formed by at least one platinum electrode and said anode is formed by said instruments to be treated.
11. (new) The process of Claim 7, wherein said instruments are stirred in said electrolyte at a stirring rate that is about 1 mm/s to 10 mm/s.
12. (new) The process of Claim 7, wherein said instruments to be treated are made of a titanium alloy having at least 40% by weight of titanium.